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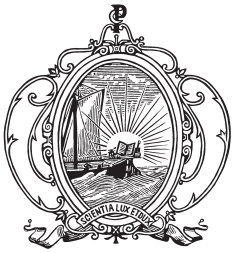

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RE-APPRAISING THE TASIAN-BADARIAN DIVIDE IN THE QAU-MATMAR REGION: A CRITICAL REVIEW OF CULTURAL PROXIES AND A COMPARATIVE ANALYSIS OF BURIAL DRESS

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The Tasian culture was first introduced by Guy Brunton in order to describe a small number of graves and 'village' objects in the Qau-Matmar region in Middle Egypt. Even though these resembled Badarian remains, Brunton advanced several arguments in order to support the notion that these belonged to a distinct pre-Badarian cultural phase. The purpose of the present paper is to re-evaluate the Tasian-Badarian cultural divide. Brunton's criteria are first scrutinised, resulting in the questioning of their validity to construct a distinct Tasian culture. This critique is further substantiated through the results of various analyses of Tasian and Badarian burial dress (i.e. beads, shells, feathers, and bangles). These show that both grave groups cannot be differentiated on account of the types of dress used, as well as their spatial distributions, materials, technologies, attributes, and burial positions. More importantly, they possibly reveal that in both burial groups the deceased were dressed with analogous items in order to construct a sex and/or age-related identity of the deceased during burial practices. On this basis, this paper proposes that the Tasian-Badarian divide in the Qau-Matmar region is no longer tenable, and that both groups of archaeological remains may rather be merged into a single archaeological unit.

Introduction

Recent discoveries in the Eastern and Western Deserts of Egypt have led to a proliferation of interest in the Tasian culture (e.g. Friedman 1999; Friedman & Hobbs 2002; Darnell 2002; Hope 2002; Gatto 2006; Math 2006; Kobusiewicz et al. 2009; 2010; Briois & Midant-Reynes 2010; Briois et al. 2012; Ehrenfeld 2014). Yet, the existence and archaeological definition of this culture have been open to question ever since it was first introduced. Guy Brunton (1929a; 1937) initially formulated the Tasian on the basis of his archaeological findings in the Qau-Matmar region in Middle Egypt. From his point of view, a relatively small number of graves displayed a distinct set of features that set them apart from a larger group of Badarian graves. In line with the then current cultural-historical perspective, this distinction was linked to a difference in cultural affiliation. The graves were consequently incorporated into an earlier 'Tasian' culture, which derived its name from the neighbouring village of Deir Tasa. A few artefact classes that were almost exclusively located in 'village' areas were subsequently added to this cultural complex on the basis of a rather ambiguous link with the Tasian graves.

Successive studies have initially sought to investigate the verity of the Tasian culture through a review of Brunton's arguments (e.g. Baumgartel 1955; 1960; Kaiser 1985; Kantor 1992). Their diverse conclusions did not lead to a unified recognition or rejection of the Tasian culture. In contrast, more recent studies have presented a more consolidated point of view. From their perspective, the Tasian culture should be seen as a desert-dwelling group of people that interacted with the Badarian population in the Nile Valley. This argument is largely based on the discovery of beakers, one of the hallmarks of the Tasian culture, in burial contexts outside the Egyptian Nile Valley (e.g. Friedman 1999; Friedman & Hobbs 2002; Hope 2002; Darnell 2002; Math 2006; Briois et al. 2012). Regardless of their specific views, however, both groups of inquiries are united in their primary focus on those objects and features that Brunton had initially defined as Tasian cultural markers.

The present paper seeks to challenge the existence of the Tasian culture in the Qau-Matmar region through a re-evaluation of these cultural proxies. In addition, it aims to further strengthen its claim by comparing Tasian and Badarian burials in the Qau-Matmar region on the basis of a mutually shared, yet unstudied group of grave goods. This collection of artefacts consists of beads, seashells, bangles, and feathers that are collectively subsumed here under the idiom of 'dress'. The results of their contextual analysis will show that Tasian and Badarian graves cannot be differentiated on the basis of the categories of dress they used, as well as their spatial distributions, materials, technologies, attributes (e.g. shape, size), burial positions, and possibly their roles in identity constructions. This will be taken to support a view in which Tasian and Badarian remains are seen as part of a single archaeological unit.

Tasian burials: a critique of their identification

Tasian and Badarian remains in the Qau-Matmar region were first identified during a series of expeditions that lasted from 1922 to 1931. Brunton directed these campaigns and published their findings in three individual reports (Brunton & Caton-Thompson 1928; Brunton 1937; 1948). In line with these reports, the region can be subdivided into three districts, called Badari (Qau el-Kebir, Hemamieh, and Badari regions), Mostagedda (Mostagedda and Deir Tasa regions), and Matmar. Further Tasian and Badarian remains have been located here by Gabra (1930), as well as by Holmes and Friedman (1989; 1994; Holmes 1993; 1994; 1996). The finds comprise the remains of cemeteries and seasonal camps of mobile herding groups, who also practiced seasonal hunting, fishing, foraging, and cereal cultivation (Wengrow 2001: 95–96; 2003: 129; 2006: 26–29, 46–47; Wengrow et al. 2014: 102–104).

The Tasian and Badarian burials in the Qau-Matmar region share a large number of features (Brunton & Caton-Thompson 1928: 18–37; Gabra 1930;

Brunton 1937: 25–32, 43–58; 1948: 9–11). In both burial groups, the mortuary structure consists of an oval or, more rarely, a rounded rectangular pit that was dug into the low desert ground. An absence of intercutting graves seems to suggest that these burials were marked. The pits accommodated the primary inhumations of adult males and females, as well as children of various ages. Even though individual burials were common, a few multiple burials have been reported for each group in the Mostagedda district. The dead were frequently put in a loosely contracted position on their left side with their heads pointing south, facing west (*contra* Darnell 2002: 163). Skins and matting were used in order to wrap or cover the deceased. At times, these materials were used in stick constructions called hamper coffins, which appear in both Tasian and Badarian burials (cf. Régen 2008: 979–981). Cloth was sometimes detected on the human remains. In a few cases, headrests of variable materials were found underneath the skulls. Both burial groups also included similar types of grave goods, and were found to be intermixed in Cemeteries 300–400, 1200, and 2200-3500 (Brunton 1937: pls. III–IV, VI–X; Baumgartel 1955: 20).

Brunton (1937: 5, 25) recognised these similarities, but believed that Tasian graves could be distinguished from Badarian graves on the presence of one or a few of the following four aspects (cf. Ehrenfeld 2014: 52):

1. Biconical bowls and other types of pottery;
2. Burial niches in the west side of the grave;
3. Palettes of stone other than "*slate*";
4. A different type of skull.

The Tasian and Badarian graves were recorded in separate Tomb Registers. Even though these registers present a clear separation between Tasian and Badarian graves (Brunton 1937: pls. VII-X), the cultural affiliation of the listed burials was not always certain (see Table 1). On this point, Brunton (1937: 5) remarks that he chose to include all burials that displayed even the slightest resemblance to the "*definitely Tasian*" in the Tasian Tomb Register. He did acknowledge, however, that the Tasian cultural label was perhaps not applicable to all of these graves. Based on the Tomb Register, 41 Tasian burials were identified in Cemeteries 300-400, 1200, 2800, 2900-3000, 3400, and 2200-3500 in the Mostagedda district.[1] Four graves in Cemeteries 2800 and 3400 were excluded from the register (Brunton 1937: 6, 13).[2] Another Tasian burial (no. 46)

[1] According to Brunton (1937: 36), Badarian grave 496a was included in the Tasian Tomb Register by mistake.

[2] In his burial descriptions, Brunton (1937: 6) included unregistered grave 2800 amongst the Tasian graves. Grave 3401 and three unregistered graves were interpreted as (probably) Tasian since a Tasian pot found nearby might have derived from one of them. Yet, grave 3401 was undisturbed, whilst one unregistered grave contained a Badarian RB bowl (Brunton 1937: 13, 26, pl. VII, XII, no. 50). This questions their identification as Tasian.

Table 1. List of graves in the Qau-Matmar region that have been linked to the Tasian culture by Brunton or Friedman. The 'comments' column cites further statements by these authors concerning this link.

Grave	Location	Comments	Bibliography
408	Mostagedda	In Tomb Register. Tasian with considerable reserve.	Brunton 1937: 5, 26, pl. VII
410	Mostagedda	See above	Ibid.
419	Mostagedda	See above. BB14p sherds in filling.	Ibid.
426	Mostagedda	In Tomb Register. Tasian with considerable reserve.	Ibid.
427	Mostagedda	See above	Ibid.
429	Mostagedda	See above	Ibid.
437	Mostagedda	See above	Ibid.
438	Mostagedda	See above	Ibid.
439	Mostagedda	See above	Ibid.
448a	Mostagedda	See above	Ibid.
448b	Mostagedda	See above	Ibid.
451	Mostagedda	See above	Brunton 1937: 5–6, 26, pl. VII
452	Mostagedda	See above	Id.: 6, 26, pl. VII
460	Mostagedda	See above	Ibid.
464	Mostagedda	See above	Ibid.
466	Mostagedda	See above	Ibid.
471b	Mostagedda	Possibly Tasian due to position underneath Badarian grave. Included in Badarian Tomb Register.	Brunton 1937: 26, pl. VIII
472c	Mostagedda	See above	Ibid.
473b	Mostagedda	See above	Ibid.
474a	Mostagedda	In Tomb Register. Tasian with considerable reserve.	Brunton 1937: 6, 26, pl. VII
487a	Mostagedda	See above. Possibly Badarian because of superposition above Tasian grave 487b.	Ibid.

Grave	Location	Comments	Bibliography
487b	Mostagedda	In Tomb Register. Tasian with considerable reserve.	Ibid.
496a	Mostagedda	In Tomb Register. Badarian, included in Tasian Tomb Register by error.	Brunton 1937: 6, 26, 36, pl. VII
496b	Mostagedda	In Tomb Register. Tasian with considerable reserve. BB sherds included.	Brunton 1937: 6, 26, pl. VII
497	Mostagedda	In Tomb Register. Tasian with considerable reserve.	Ibid.
1210	Mostagedda	In Tomb Register. Pot probably Tasian, but not distinctly so.	Ibid.
2206	Mostagedda	Registered as part of the Badarian cemetery, but may belong to Tasian village.	Brunton 1937: 6, pl. IX
2800	Mostagedda	No objects, but included amongst Tasian burials in main text.	Id.: 6
2817	Mostagedda	Probably Tasian, but included in Badarian register.	Id.: 6, pl. X
2818	Mostagedda	Included in Badarian Tomb Register, but might be Tasian. It was located in Cemetery 2900, but was given the wrong number.	Id.: 6, pl. X
2829	Mostagedda	In Tomb Register. Definitely Tasian.	Brunton 1937: 6, 25, pl. VII
2838	Mostagedda	See above	Ibid.
2840	Mostagedda	See above	Ibid.
2841	Mostagedda	See above	Ibid.
2842	Mostagedda	See above	Brunton 1937: 7, 25, pl. VII
2843	Mostagedda	See above	Ibid.
2851	Mostagedda	See above	Ibid.
2852	Mostagedda	See above	Ibid.
2853	Mostagedda	See above	Ibid.

Grave	Location	Comments	Bibliography
2854	Mostagedda	See above	Ibid.
2913	Mostagedda	See above	Ibid.
3002	Mostagedda	See above	Ibid.
3003	Mostagedda	See above. Tasian pot and skull.	Brunton 1937: 7, 25–26, pl. VII
3004	Mostagedda	In Tomb Register. Definitely Tasian.	Brunton 1937: 7, 25, pl. VII
3006	Mostagedda	See above	Ibid.
3011	Mostagedda	See above. Tasian pot and skull.	Brunton 1937: 7, 25–26, pl. VII
3015	Mostagedda	In Tomb Register. Definitely Tasian.	Brunton 1937: 7, 25, pl. VII
3400-i	Mostagedda	Unregistered grave. Probably Tasian. Deep RB bowl present.	Brunton 1937: 7, 13, 26
3400-ii	Mostagedda	Unregistered grave. Probably Tasian. One Tasian pot.	Ibid.
3400-iii	Mostagedda	Unregistered grave. Probably Tasian.	Ibid.
3401	Mostagedda	In Tomb Register. It was found with graves 3400-i to -iii, to one of which probably belonged a Tasian pot.	Brunton 1937: 7, 26, pl. VII
3533	Mostagedda	In Tomb Register. Subjacent to Badarian grave 3509. Contained a pot that is more Tasian than Badarian.	Ibid.
3551	Mostagedda	In Tomb Register. Considered Tasian on the basis of skull type. SB potsherd cited, but not deemed distinctive of Badarian.	Brunton 1937: 7, 26–27, pl. VII
46	Deir Tasa	Tasian according to Brunton, on account of pot (?) and possible burial niche.	Brunton 1937: 26, 29; Gabra 1930: 150, fig. 2, 151, 156, pl. III
No number	–	Remains of a plundered grave that is possibly Tasian.	Friedman 1994: 58, note 1

was identified by Brunton in a Badarian cemetery at Deir Tasa, excavated by Gabra (Brunton 1937: 26, 29).

Brunton considered the graves from Cemeteries 2800 and 2900-3000 to be definitely Tasian (Brunton 1937: 25–26). Only two burials (2817, 2818) were included in the Badarian Tomb Register due to their lack of grave goods. Still, they were perceived as "*probably Tasian*" on the basis of the cemetery in which they were found (Brunton 1937: 6, pl. X). The other Tasian burials were identified with more or less certainty on the basis of their pottery contents or skull type. Brunton did, however, express his concerns on the Tasian affiliation of the graves in Cemetery (300-)400 (Brunton 1937: 26, pl. VII). These were mixed with Badarian graves, but contained Tasian-like pottery. The average depth of the Tasian adult graves was also deeper than that of the Badarian adult graves, and similar to that of adult graves in Cemeteries 2800 and 2900-3000. His doubts were based on a number of superimposed burials, of which some were found in Cemetery 300-400. Brunton believed the Tasian to precede the Badarian, and thus believed that such burials represented Tasian graves overlain by Badarian graves. His identification of subjacent Badarian graves in Cemetery 300-400 made him doubt on the cultural affiliation of all 'Tasian' graves in this burial ground (Brunton 1937: 26, 44–45, pl. VII).

The criteria that were used to identify Tasian graves are significant, since they have been fundamental to the recognition of other Tasian artefacts that were mostly found in activity areas. For this reason, the following subsections will focus on the validity of the criteria that have been used to discriminate Tasian from Badarian burials. The discussion will subsequently turn to an appraisal of Tasian activity areas, and an evaluation of the proposed Tasian-Badarian chronological sequence in the Qau-Matmar region.

Biconical bowls and other types of pottery

The vast majority of Tasian burials have been identified on the basis of their pottery contents. This artefact group has ultimately been the basis for identifying the Tasian association of the burial niches, palettes, skulls, and possibly the 'village' remains that are discussed below. For this reason, pottery has played a key role in creating the Tasian-Badarian cultural distinction. Tasian pots have been described as deep and shallow, rounded or biconical bowls with a small flat base and a wide mouth. Their bulge can display a sharp angle. These handmade vessels have been subdivided into brown ware and grey-black ware.[3] The uncombed surface of brown ware is usually left rough, and is only occasionally covered by a grey slip. Grey-black ware is smoothed and rippled vertically, and

[3] The brown colour is mentioned to vary from a reddish-brown to a greyish tint, whilst the grey-black colour is mentioned to vary from grey-brown to black (Brunton 1937: 28).

sometimes burnished. Red or black-topped wares are more rarely associated with Tasian graves (Brunton 1929a: 465, 1937: 25, 27–28, pls. XI, XII, XVI, no. BR15g, XVIII, nos. AB20–21, MS33, XIX, nos. SB4m, RB3h, 4m-n, 7e, 7p, XX, nos. 14p, 36m, XXI, nos. 43m, 43q, 54h; see also Friedman 1994: 108; Ehrenfeld 2014: 48).

The central question is why these pots were set apart from the Badarian repertoire. On this point, Brunton (1937: 28) states that it was not possible to detect the combination of a flat base and angled sides amongst the pottery corpora from other periods. Since he was unable to identify the biconical bowls amongst the recognised set of Badarian pottery from the Badari district, he assumed that they had to belong to a different culture altogether. Even though this practice was in line with the culture-historical perspective of the time, it is remarkable that Brunton had altogether dismissed the idea of temporal, regional, social, or perhaps even functional variation within the confines of the Badarian cultural complex.[4]

Math (2007: 214–216) has recently stressed that there is an absence of standardisation in Badarian pottery from the Qau-Matmar region. Tasian pottery is similarly diverse, since only few vessel types include more than a single exemplar (Math 2006: 50, note 44). This large variability complicated the process of assigning pots (and, by extension, graves and other archaeological units) to the different cultures. Brunton (1937: 26) frequently refers to this problem, when he notes that pots are "*probably Tasian though not distinctly so*", "*more Tasian than Badarian*", or "*more Tasian in feeling than Badarian*". This shows that Brunton's cultural definition was far from certain, and more or less based on an educated guess. On this point, it is also interesting to refer to Friedman (1994: 108) who has briefly remarked on Brunton's disregard of the fabric of Tasian biconical bowls. Her inspection of a selection of these bowls shows that their fabrics are indistinguishable from those of the Badarian smooth brown (SB) and rough brown (RB) pottery classes.[5] This correspondence may indicate the invalidity of distinguishing Tasian and Badarian pottery found in burials.

Burial niches

Four Tasian burials (451, 474A, 2842, and 3006) were furnished with a burial niche (Brunton 1937: 5–7, 25–26). In all graves, a pot was placed inside the niche. Brunton (1937: 26) further recalls the possible presence of a burial niche

[4] At an early stage in his research, Brunton (1928: 86) considered the graves to belong to a second, earlier phase of the Badarian civilisation, and did not connect them to a different culture and/or racial group.

[5] Friedman (1994: 122, note 13) inspected three vessels from graves 429, 436, and 2911 in the Mostagedda district (Brunton 1937: pls. XI, nos. 30, 33, XII, no. 40), as well as another vessel discovered during a survey of Area 2900-3000 (Holmes & Friedman 1994: 111, 115, fig. 7).

in Tasian grave 46 at Deir Tasa, even though this is not reported by its excavator Gabra (1930: 150–151, fig. 2). Either way, the burial niche does not appear to have been a consistent feature amongst the Tasian burial group, in spite of the fact that Brunton tentatively linked its absence to burial disintegration (Brunton 1937: 5–7, 26). Moreover, a burial niche was also noted in the west side of Badarian grave 1243, which was similarly found to contain a pot (Brunton 1937: 44; cf. Baumgartel 1955: 21). The fact that a burial niche was noted in only a few Tasian burials, as well as a single Badarian burial demonstrates that it cannot be interpreted as a typically Tasian feature.

Palettes of stone other than "slate"

A total of six palettes were found in five Tasian graves (2840, 2841, 2853, 3003, 3004) and Area 2200 in the Mostagedda district (Brunton 1937: 29–30, pl. XIII). Four are made of "*alabaster*" (i.e. travertine, see Harrell 1990), one is made of limestone, and another of "*slate*" (i.e. a misnomer for a form of greywacke, see Harrell 2002: 239; Stevenson 2007b: 150; 2009: 1). Their shapes are (nearly) square to oblong or rectangular, and, as such, match the shapes of a number of Badarian palettes (Brunton & Caton-Thompson 1928: 30, pl. XXI, 1–6; Brunton 1937: 30, 54, pls. XIII, 19–20, 23–25; XXIV, 8–10; 1948: 10, pl. V, 12).[6]

According to Brunton, the use of travertine and limestone palettes contrasts with the Badarian practice of using palettes that are exclusively made of greywacke. The basis for this claim is questionable, however. Two burials (2853 and 3004) have been classified as Tasian solely on the basis of their travertine palettes, and not on account of any other Tasian feature. This is in contrast to the other two burials (2840 and 2841) that, apart from a travertine or limestone palette, also included Tasian pottery (Brunton 1937: pls. VII, XIII). Hence, graves 2853 and 3004 were classified as Tasian by the mere virtue of the fact that the presence of their non-greywacke palettes paralleled the presence of the non-greywacke palettes in the two distinctly Tasian graves. The same can be said for the travertine palette from Area 2200 (Brunton 1937: 17, 30). This shows that Brunton was biased in assuming that only palettes of greywacke could belong to the Badarian repertoire (cf. Brunton 1929a: 465).

That this idea is clearly unfounded is further exemplified by a pair of black and white porphyry palettes that were found together in a basket at Badari (Brunton & Caton-Thompson 1928: 5, 35; cf. Stevenson 2007b: 151). These palettes were part of a larger cluster of artefacts in Area 5548, which Brunton identified as Badarian, even in retrospect (Brunton & Caton-Thompson 1928: 5–6; cf. Brunton 1937: 32). These rectangular and trapezoidal palettes are housed in

[6] A travertine palette fragment was also found during the survey of Holmes and Friedman (1994: 111, 115, fig. 8) in Area 2900-3000. They consider the palette fragment to be Badarian.

the British Museum (EA59695-6), where their material has been re-identified as grey and white dioritic stone.[7] This demonstrates that palettes of other types of stone could also be used in Badarian contexts. There is thus no reason to assume that graves containing travertine or limestone palettes could not belong to the Badarian cultural complex.

Tasian vs. Badarian skulls

Brunton (1937: 27) argued that the Tasian skulls "[…] *showed a strongly marked type with wider heads and much squarer jaws than the Badarians* […]". Yet, this observation is merely based on a total of three Tasian skulls, as compared to more than 100 Badarian skulls from the Badari and Mostagedda districts (cf. Morant 1935: 293). The small amount of Tasian skulls was linked to the bad preservation of the bodies in Cemeteries 2800 and 2900-3000. The skulls were found in graves 3003, 3011, and 3551. Grave 3551 was initially classified as Badarian, but was later deemed to be Tasian on the basis of its skull type. The only other artefact found in grave 3551 was a smooth brown (SB) potsherd, which Brunton dismissed as being "*in no way distinctive*" of the Badarian culture. Conversely, two skulls from Tasian graves 460 and 466 were deemed to be of the Badarian type, although they contained Tasian pottery (Brunton 1937: 26–27, pls. VII, LXXXIV).

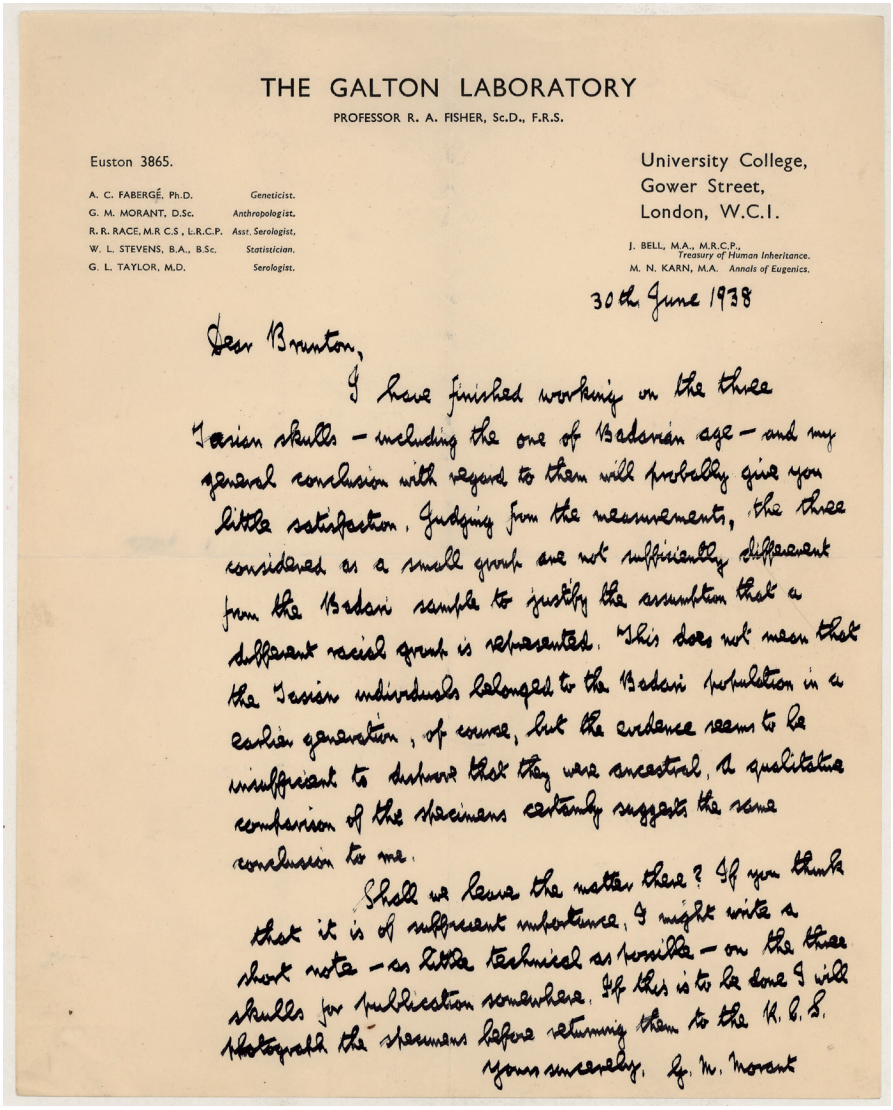
Brunton does not provide further anthropological support for his observation. This is remarkable since the *Mostagedda* volume also includes a chapter by physical anthropologist G.M. Morant. In here, Morant focuses on the racial affinities of the Badarian skulls from the Badari and Mostagedda districts. For unclear reasons, the Tasian skulls are not incorporated in this discussion, even though Brunton stressed their racial distinction from Badarian skulls (Morant 1935: Appendix 1–2; 1937: 63–66; Brunton 1937: 25–27, 32–33). It was only at a later stage that Brunton requested Morant to examine the Tasian skulls. This is clear from a letter dated to 30th June 1938 (Fig. 1), in which Morant describes his findings to Brunton:[8]

> *"I have finished working on the three Tasian skulls – including the one of Badarian age – and my general conclusion with regard to them will probably give you little satisfaction. Judging from the measurements, the three considered as a small group are not sufficiently different from the Badari sample*[9] *to justify the assumption that a different racial group is represented. This does not mean that*

[7] Data retrieved from online collection database of the British Museum, which was consulted on March 14th, 2017. Cf. Friedman et al. this volume: 249, fig. 13c.

[8] This letter was part of Brunton's personal library, which is currently housed in the Historical Papers Research Archive, University of the Witwatersrand in Johannesburg, South Africa (cf. Bierbrier 1995: 69).

[9] The Badari sample refers to the Badarian skulls from the Badari and Mostagedda districts.



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30th June 1938

Dear Brunton,

I have finished working on the three Tasian skulls – including the one of Badarian age – and my general conclusion with regard to them will probably give you little satisfaction. Judging from the measurements, the three considered as a small group are not sufficiently different from the Badari sample to justify the assumption that a different racial group is represented. This does not mean that the Tasian individuals belonged to the Badari population in a earlier generation, of course, but the evidence seems to be insufficient to disprove that they were ancestral. A qualitative comparison of the specimens certainly suggests the same conclusion to me.

Shall we leave the matter there? If you think that it is of sufficient importance, I might write a short note – as little technical as possible – on the three skulls for publication somewhere. If this is to be done I will photograph the specimens before returning them to the R. C. S.

Yours sincerely, G. M. Morant

Fig. 1. Letter from G.M. Morant to Guy Brunton (University of the Witwatersrand: A2979 Guy Brunton). Courtesy of the Historical Papers Research Archive, University of the Witwatersrand in Johannesburg, South Africa.

> *the Tasian individuals belonged to the Badari population in a[n] earlier generation, of course, but the evidence seems to be insufficient to disprove that they were ancestral, a qualitative comparison of the specimens certainly suggests the same conclusion to me. Shall we leave the matter there? If you think that it is of sufficient importance, I might write a short note – as little technical as possible – on the three skulls for publication somewhere. If this is to be done I will photograph the specimens before returning them to the R.C.S.* [Royal College of Surgeons in London]*."*

This letter shows that Morant carried out analyses on the three Tasian skulls. According to him, their results appear to be inconsistent with Brunton's notion of a distinct racial group. Instead, he stresses that Tasian and Badarian skulls cannot be sufficiently distinguished from each other. Even though he indicates that the Tasian individuals could have belonged to an earlier generation of the Badarian population, he notes that more evidence is needed in order to prove this. Whilst it is difficult to evaluate Morant's findings, it is noteworthy that they have remained unpublished. Brunton also did not refer to them in his later report on the Matmar region. In here, he merely quotes the conclusions reached by physical anthropologist D.E. Derry on a number of Badarian skulls from Matmar (Brunton 1948: 11): "*Professor D.E. Derry, referring to the Badarian skulls sent to him, writes (1931): "I have only ten measurable skulls but several of them approximate to the shorter-headed, straight-faced, Tasians. I begin to think that these represent different tribes of one common stock* […]*"* ." It seems that this statement better suited Brunton's theory since it still assumed a Tasian-Badarian group distinction, in spite of an apparent recognition of the geometrical similarity between both skull groups. Thus, the evidence gathered here shows that Brunton's assertion is fraught with difficulties, besides his misguided attempt to define racial groups.[10] The three Tasian skulls are hardly representative for the 41 Tasian individuals cited in the Tomb Register. This is especially so when one considers that one of the skulls was only identified as Tasian on the basis of its acclaimed morphological similarity to the other two skulls. Brunton (1937: 32) certainly realised this statistical invalidity and admitted fully to the uncertainty

[10] At the beginning of the twentieth century, the term 'race' was not clearly defined: it could be related to various aspects, such as geography, class, religion, or colour (Barkan 1992: 2). Nowadays, it is recognised that race is a social construction that lacks a biological foundation (Keita 1990: 36–37; Challis 2013: 3). Brunton's interest in defining racial groups had previously been evinced by his tutor W.M.F. Petrie, and has been linked to the latter's eugenic philosophy (Silberman 1999; Sheppard 2010; Challis 2013). Morant was anti-racialist, but supported the scientific use of racial typology. He had been a student of Karl Pearson, a major proponent of eugenics. Petrie and Pearson had close working relationships with each other, as well as with Francis Galton, the creator of eugenics. Petrie had, for instance, sent the Badarian skulls from Badari to Pearson for inspection (Morant 1935: 293). Brunton's relation to Morant probably ensued from this earlier collaboration. Morant was attached to the Galton Laboratory, an institute that had initially been directed by Pearson and that was founded by Galton for eugenics research (Barkan 1992: 151–162, 293–294; Sheppard 2010; Challis 2013).

of his arguments. Nevertheless, he clearly favours his theory when concluding: "*it may not be unfair to infer that the* [Tasian] *culture and* […] *racial type* […] *may have had some connection*" (Brunton 1937: 32–33).[11] His desire to confirm this belief might explain why he preferred Derry's interpretations above those of Morant. It might also clarify the reason why he was keen to define a Tasian racial type, even to the extent that it involved some dubious reasoning with regard to the cultural ascription of graves 460, 466, and 3551.

Tasian activity areas: a critique of their identification

Brunton (1937: 8) jointly discussed Tasian and Badarian activity areas since he was uncertain on their cultural affiliation.[12] This, as he put it, was a result of his "*very elementary knowledge of the Tasian culture*", and a lack of pottery and lithics "*of the better class*". Still, this did not stop him from assigning certain remains to either culture (Brunton 1937: 8–25, 32; 1948: 4). This is also apparent from the Tomb Registers, in which he culturally allocates Town Groups, i.e. groups of artefacts that were found in close association with each other. In addition, Brunton has described a large number of freestanding objects that were not entered into the Tomb Registers. Like the Town Groups, these artefacts are described in the main text according to the low desert spur, or spur section, on which they were found.

In spite of Brunton's problems in dating activity areas, he did connect a variety of objects with the Tasian culture. These comprise certain pottery classes (e.g. Tasian beakers), various types of stone celts (i.e. axes), and large and rough lithic tools, of which many retain areas of cortex (Brunton 1937: 27–29, 31–32; 1948: 4). The basis for the cultural identification of these lithic tools is dubious. Whilst Brunton (1937: 31–32) initially argued that Tasian and Badarian lithic tools could not be separated, he subsequently identified the aforesaid tools as being noticeably different from Badarian tools (Baumgartel 1960: 35, note 3; Holmes 1989: 178). The evidence for this is unclear, however, he does inform that the "*village sites*" were dated on the basis of "*well-defined and typical forms of pots and implements*". If there was no mixture of Tasian and Badarian finds, all artefacts from a certain area were dated to a specific culture. Yet, the results from this exercise were indefinite, and Brunton (1937: 31)

[11] In an earlier published exhibition guide, Brunton (1929b: 2–3) expresses the same view: "*The* [Tasian] *type of skull is another remarkable difference – as it is unlike that of the Badarians and Predynastics who were doubtless of the same racial stock which persisted for centuries in the Nile Valley* […]".

[12] The term 'activity area' is used here, as it is hard to characterise the archaeological remains on the basis of Brunton's descriptions. They might be the remains of seasonal camps of mobile herders, mortuary practices, or other types of activities, in spite of Brunton's general remark that these were remains of settlements or villages.

called for the need of expert analysis and drawings. Later, Holmes (1989: 178) undertook this task and concluded that Tasian and Badarian lithic tools cannot be differentiated.

The question can still be raised as to what Brunton defined as typical Tasian artefacts in activity areas. Chief amongst these were rough or (partly) ground celts of limestone or igneous rock (Brunton 1937: 31–32). These objects were included in the Tasian corpus on the basis of 'Tasian' grave 46 at Deir Tasa (Brunton 1937: 29, 31–32). This grave contained two celtoid tools and a single pot (Gabra 1930: 150–151, fig. 2). Yet, Brunton did not provide evidence for the Tasian affiliation of this grave other than the doubtful presence of a burial niche (see above). Though Gabra (1930: *passim*) referred to his graves as "*tassien*", this was solely meant to distinguish his Badarian graves at Deir Tasa from the graves that Brunton had located at Badari (*contra* Ehrenfeld 2014: 48–49). In fact, he uses the terms "*tassien*" and "*badarien*" interchangeably or even conjointly (cf. Gabra 1930: 152, pl. IV, caption). It is, therefore, likely that the cultural classification of grave 46 was based on its pot. Gabra (1930: 150, fig. 2, 156, pl. I, 10) only published a vague drawing and photograph of this object, and dated it to the "*tassien*" (i.e. Badarian). It has subsequently been described as a Badarian "*rough red pot*" (Abou-Ghazi 1984: 13), and as a non-Tasian "*rough pot of indefinite type*" (Baumgartel 1955: 20). Indeed, the pot does not appear to be distinctly biconical or to have a flat base, and might be classed as a Badarian Rough Brown (RB) pot instead (cf. Holmes & Friedman 1994: 110–111, 115, fig. 7). Further analysis would be needed to corroborate this.

Grave 46 also proved instrumental in connecting the Tasian culture to "[…] *a series of flaring-lipped caliciform beakers made of black pottery decorated with incised designs filled in with white pigment* […]" (Brunton 1937: 29; Friedman 1999: 3)[13]. These 'Tasian beakers' are currently regarded as the hallmark of the Tasian culture (cf. Math 2006: 45; Ehrenfeld 2014: 48). They have not been recorded in Tasian graves; instead, their cultural ascription is based on their contextual association with celts in six activity areas (Brunton 1937: 29).[14] The absence of stratigraphical evidence makes it difficult to evaluate this correlation. Still, Brunton's reports reveal that celts and beakers are often accompanied by Badarian artefacts, or are located near Badarian graves (Brunton 1937: 13–19, 22–23, pls. I-III). This also seems to apply to those areas that contain either celts or beakers (Brunton & Caton-Thompson 1928: 3, 5; Brunton 1937: 7–25; 1948: 4; Holmes & Friedman 1989: 15; Holmes 1993: 23–24;

[13] Brunton (& Caton-Thompson 1928: 3, 5; 1937: 7–25; 1948: 4, 7) reported a Tasian beaker in grave 569 (Qau el-Kebir), and 23 Tasian beaker fragments in Cemetery 1400 (Qau el-Kebir), activity areas 5400 (Badari), 100, 400, 2000, 2100, 2200, 2600, 2800, and 3500 (Mostagedda), as well as grave 2000 (iii) (Matmar).

[14] Activity areas 100, 400, 2000, 2200, 2600, and 3500.

Friedman 1999: 9). While Brunton (1937: 29, 31–32) acknowledged that activity areas could yield a mix of Tasian and Badarian finds, he failed to interpret it as evidence against the Tasian culture. Instead, their concurrence was linked to a possible overlap of both cultures, an argument that verges on circular reasoning.

Even though Brunton associated the activity areas with the remains of settlements, their individual descriptions show that this is not always the case. Some objects are suggested to have come from graves (Brunton 1937: 8, 17–19, 21–23), whilst others may be related to the performance of mortuary practices (cf. Brunton & Caton-Thompson 1928: 9, 42). In fact, a few beaker sherds were deemed to be (potential) grave goods themselves (Cemetery 1400 and Area 5400; Brunton & Caton-Thompson 1928: 3, 5), whilst another sherd was found in close proximity to an alleged grave good (Group 436; Brunton 1937: 22). This throws doubt on the notion that most Tasian beakers were part of settlement debris (*contra* Kantor 1992: 8; Friedman 1999: 9; Darnell 2002: 164; Math 2006: 47). Although grave 569 at Qau el-Kebir is usually cited as the only Badarian grave with a Tasian beaker (Brunton & Caton-Thompson 1928: 3; Friedman 1999), a single beaker sherd was also found in the filling of Badarian grave 2000 (iii) in the Matmar region (Brunton 1948: 4, 7; cf. Ehrenfeld 2014: 59). The (former) inclusion of beakers in Badarian burials casts doubt on their Tasian affiliation. For this reason, Brunton (1948: 4, 7) hypothesised that the beaker sherd in Badarian grave 2000 (iii) was intrusive, even though it could equally have been designated as a Badarian grave good. The sherd from Cemetery 1400 was implicitly rejected as a Badarian burial good when its findspot was later revised into "*Area 1400*" (Brunton 1937: 32). While grave 569 was dated to an early Badarian phase on account of its BB bowl, its beaker was explained as the result of a temporal overlap of the Tasian and Badarian cultures (Brunton 1937: 29).

More recently, Friedman (1999: 9; Friedman & Hobbs 2002: 189) has theorised that the Tasian beakers were produced by a desert-based group that interacted with the Badarian peoples in the Nile valley. This argument is based on the presence of beakers in the Eastern and Western Desert, where they are commonly found in graves. This was believed to contrast with the situation in the Qau-Matmar region, where beakers are supposedly primarily found in settlement contexts. Hence, the Tasian beaker was claimed to be an import that was deemed undesirable as a grave good. This interpretation is no longer tenable in light of the findings presented above, which support a more extensive funerary use of beakers in the Qau-Matmar region. Beakers were certainly also part of occupation remains. In fact, a recent excavation of Area 3400 has established two beaker sherds in a trash pit context. Yet here, their concurrence with Badarian finds is used to ascribe the beakers to the Badarian repertoire (Holmes 1993: 23–24, fig. 2; 1996: 184). Most beakers found outside the Nile Valley are also

distinguishable from Tasian beakers (see Friedman & Hobbs 2002: 189; Math 2006). Parallels have only been reported in Badarian to early Naqada I contexts at Armant and Mahgar Dendera II in the Nile Valley, as well as in the Rayayna Desert and Dakhla Oasis (Mond & Myers 1937: 61; Ginter et al. 1986: 65; Hendrickx & Midant-Reynes 1988: 8, pl. VI, 5–6; Hendrickx et al. 2001: 70, 84–85, pl. 56; Hope 2002: 48, fig. 10c; Darnell 2002: 164–165, pl. 93; cf. Friedman & Hobbs 2002: 189; Math 2006: 48; Gatto 2006: 104). In spite of the latter two locations, the Nile clay fabric of the Tasian beakers from the Qau-Matmar region has been likened to that of Badarian utility wares (Friedman 1999: 4; Friedman & Hobbs 2002: 189), which could suggest that the same group of people was responsible for their production in the Nile Valley.

The Tasian-Badarian chronological sequence

Brunton cautiously interpreted the Tasian culture as an earlier phase of the Badarian, for which he advanced several arguments (Brunton 1929a: 466–467; 1929b: 2; 1937: 32):

1. The culture is more primitive and shows similarities to the early Badarian;
2. The pottery is usually more rough and primitive;
3. The travertine and limestone palettes are more like the early Badarian palettes than the later Badarian 'notched' palettes;
4. There are possibly Tasian burials underlying Badarian ones.

In two arguments, reference is made to an early Badarian phase. Yet, its existence was merely presumed on a provisional sequencing of Badarian graves using style changes in pottery (Brunton & Caton-Thompson 1928: 26, pl. XIXA). Friedman (1999: 9) and Math (2007: 212–216) have noted that there are no grounds on which this internal chronology can be accepted. Furthermore, the 'rough' or 'primitive' character of the Tasian assemblage does not need to have a temporal (or cultural) cause, but could also be related to utilitarian, social, or regional phenomena. Needless to say, artefact quality cannot be used independently in order to define a chronological sequence. As regards point 4, there is a lack of conclusive evidence for the consistent superimposition of Badarian on Tasian burials (Brunton 1937: 26, 44–45; cf. Baumgartel 1955: 20). Its practice was assumed to be an accidental product of time, in which the different burials could be linked to distinct cultural groups. Yet, evidence for this is not provided, nor is the idea of a purposive and concurrent mortuary act considered.[15] Brunton (1937: 26) further sought to verify the Tasian temporal precedency through a comparison of burial depth. Its measurement is convoluted, however,

[15] A similar practice is reported for Neolithic cemeteries in Egypt, Nubia, and Sudan (e.g. Reinold 2000).

by geomorphological episodes of denudation and deposition, a problem that was recognised by Brunton (& Caton-Thompson 1928: 18; Brunton 1937: 26). Proper stratigraphic evidence would be needed in order to prove the chronological primacy of the Tasian burials, evidence that does not seem to have been available (Baumgartel 1955: 20; Math 2007: 215). Lastly, Midant-Reynes (2000: 165) has referred to a lack of copper in Tasian contexts as evidence for the Tasian precedency. Yet, the reported quantity of copper finds in Badarian contexts is limited to a single copper pin and 13 copper beads from a total of five graves found across the Qau-Matmar region (Brunton & Caton-Thompson 1928: 7, 12, 27; Brunton 1937: 37, 41, 51–52; 1948: 10, pl. LXX). Possible traces of copper were recorded in three graves in the Mostagedda district (Brunton 1937: 57). Given this tiny amount of copper in Badarian contexts, its absence from the relatively rare Tasian contexts cannot be held as evidence for their cultural or temporal distinction.

Tasian and Badarian dress items from the Qau-Matmar region

Previous research on the verity of the Tasian culture has focused primarily on the validity of Brunton's criteria (e.g. Baumgartel 1955: 20–21; Kantor 1992: 7–8; Kaiser 1985; Midant-Reynes 2000: 165–166). It has consequently centred on those objects and features that were considered to be indicative of the Tasian culture. Apart from a study of lithic tools (Holmes 1989), there has not been a comparative study of any other object group found in Tasian and Badarian burials. One of the most common sets of artefacts to appear in both burial groups are items of 'dress'. Following Eicher and Roach-Higgins (1992; cf. Eicher 1995: 1), dress includes all sensory modifications and supplements to the human body. The Tasian and Badarian dress items include a subset of body supplements that one could also call 'jewellery' or 'body ornaments'. Yet, these definitions implicitly refer to, and centre on an, as yet, untested aesthetic value of these objects (however, cf. Stevenson 2007a). Likewise, terms such as 'personal display' stress the visual perception of dress to the exclusion of other sensory experiences (cf. Eicher & Roach-Higgins 1992: 13–14; Boivin 2008: 97–98).

Dress is an important part of the archaeological assemblage as it was potentially a means through which social relationships and interactions were negotiated (Díaz-Andreu & Lucy 2005: 9). A recent ethnographic review by Vanhaeren (2005: 527–533) has shown that dress can be used in order to communicate ethnic identity, an affiliation to one or more social groups (e.g. based on age, lineage, or gender), or a unique social status (e.g. chief, shaman).[16] Yet, dress

[16] Identity will be interpreted here as "*individuals' identification with broader groups on the basis of differences socially sanctioned as significant*" (Díaz-Andreu & Lucy 2005: 1).

does not merely signal a pre-existing, essentialist identity, it actively helps to construct it (Fisher & Loren 2003: 225; Joyce 2005: 142–143). Dress is also potentially polyvalent, in that similar items are able to shape multiple, diverse, and context-dependent identities (Casella & Fowler 2005: 2, 4). Moreover, identity is not constituted by dress alone, but also by "*how one wears it, as well as one's posture, language, actions and position in social and physical landscapes*" (Fisher & Loren 2003: 226).

Most Tasian and Badarian dress items were found in a mortuary context, whilst others, found in 'village' remains, might derive from there. Graves are the results of deliberate acts of disposal by past peoples, and, if undisturbed, form primary contexts of the final use of their contents. Dress could have been owned and worn by the dead during life, but it might also have been used by the living to manipulate, negotiate, appropriate or remove former identities of the dead (Rakita & Buikstra 2005: 2, 6–7). As Parker Pearson (1999: 84) states, "[i]*n many societies, funerals are not simply reaffirmations of social structure and social roles but a central moment in life, inheritance and economy*". The inclusion of dress might also result from practices such as gift giving by the living. In life, identity is not static, but a continuous process that is constructed through active social practice. Individuals may have multiple identities at a time or over certain historical trajectories. Identities can change in time, or shift depending on the context of social interaction (Díaz-Andreu & Lucy 2005: 1–2; Casella & Fowler 2005: 1–2; Insoll 2007: 6). The mortuary domain is interpreted here as just another social context performed and enacted in by the living. The identities of the dead that are formulated during and through mortuary practices are, therefore, just as pliable and resultant of social practice as those in other social contexts. The social identities of the dead should, therefore, not necessarily be seen as reflecting the social identities of the living, which themselves were in a constant state of flux (Horn 2010: 42–49). Since identities are socially mediated and culturally linked (Díaz-Andreu & Lucy 2005: 2), it may be possible to evaluate the verity of the Tasian-Badarian cultural distinction through a study of dress items and the potential role that they played in the construction of identity in a single, mortuary context.

The ensuing sections will compare Tasian and Badarian dress items and their potential role in the construction of identity in a mortuary context. These form the results of their contextual analysis, which was undertaken as part of the author's MA research (Horn 2010). The data provided in Brunton's reports was used as a basis for this study.[17] Whilst these are comprehensive, they do present problems relating to Brunton's excavation and publication methods (Dubiel 2008: 1–22; Horn 2010: 53–57). This pertains to his neglect of 'poor'

[17] The Badarian cemetery excavated by Gabra (1930) has not been published in the same detail. For this reason, his graves have been excluded from the analyses in this paper.

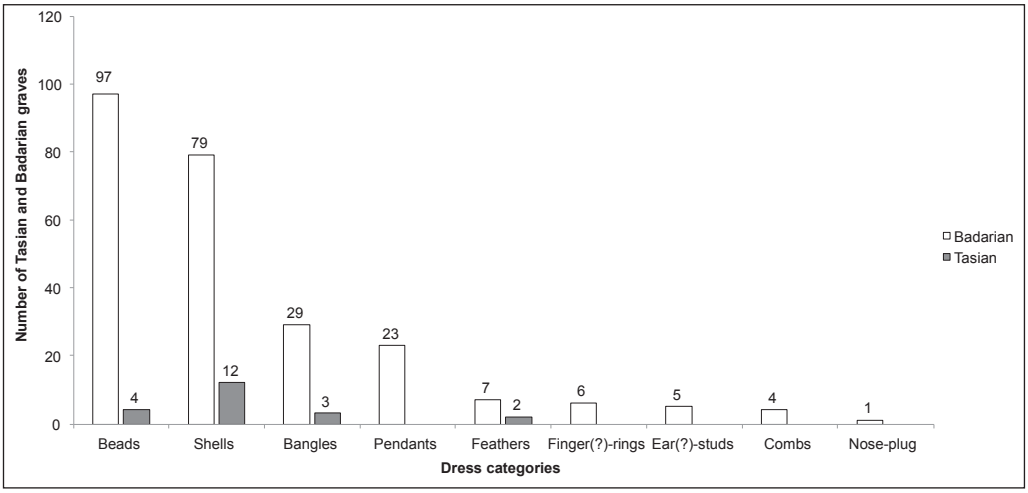

Fig. 2. Bar chart showing dress categories and the total number of Tasian and Badarian burials in which they have been found. Based on data published by Brunton.

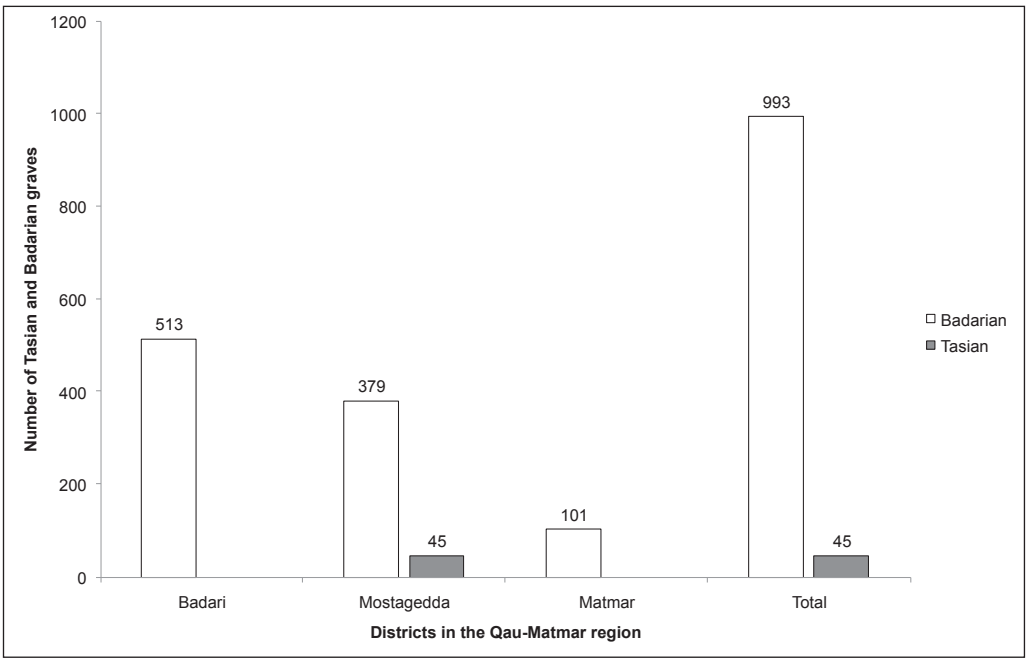

Fig. 3. Bar chart showing total number of Tasian and Badarian burials for each district in the Qau-Matmar region. Based on data published by Brunton.

Table 2. Calculation of 1-sample chi-squared (χ^2) test values to explore whether Badarian graves with pendants are equally distributed across districts in the Qau-Matmar region.

Districts within the Qau-Matmar region	Observed no. of Badarian graves with pendants (O)	Total number of Badarian graves	% of graves in Qau-Matmar region	Expected no. of Badarian graves with pendants (E)
Badari	17	513	51.66	11.88
Mostagedda	3	379	38.16	8.78
Matmar	3	101	10.17	2.34

Hypotheses:

H_0: Badarian graves with pendants are equally distributed across the districts in the Qau-Matmar region.
H_1: Badarian graves with pendants are not equally distributed across the districts in the Qau-Matmar region.

If $\chi^2_{calc} \geq \chi^2_{\alpha}$, reject H_0
If $\chi^2_{calc} < \chi^2_{\alpha}$, accept H_0

$$\chi^2 = \sum_{i=1}^{k} \frac{(O_i - E_i)^2}{E_i} = \frac{(17 - 11.88)^2}{11.88} + \frac{(3 - 8.78)^2}{8.78} + \frac{(3 - 2.34)^2}{2.34} = 6.19$$

Since $\chi^2_{calc} > \chi^2_{0.05}$ (6.19 > 5.99, at two degrees of freedom), the null hypothesis (H_0) is rejected at a significance level of 0.05 (see also Shennan 1997: 104-109, 422-423, Table F).

Yet, the chi-squared value is considered to be invalid when expected frequencies are less than 5. To counter this problem, it is possible to combine the Mostagedda and Matmar districts into a single category, thus producing two distinct districts: Badari and Mostagedda-Matmar. The chi-squared value can then be calculated as follows:

$$\chi^2 = \sum_{i=1}^{k} \frac{(O_i - E_i)^2}{E_i} = \frac{(17 - 11.88)^2}{11.88} + \frac{(6 - 11.12)^2}{11.12} = 4.56$$

Since $\chi^2_{calc} > \chi^2_{0.05}$ (4.56 > 3.84, at one degree of freedom), the null hypothesis can again be rejected at a significance level of 0.05.

burials[18], the absence of exact bead or shell quantities[19], the accuracy of material or sex/age identifications, object location in graves[20], and a dearth of burial drawings, amongst others. Still, some problems can be overcome through a study of the excavated remains. For this reason, the author is presently engaged in an analysis of Tasian and Badarian dress items in various museums. This forms part of his PhD research that aims to verify Brunton's data on dress items, and to add further knowledge regarding their material, quantity, production technology, and use. Some of its results have been included below.

Dress categories

The Tasian and Badarian graves yielded similar sets of dress categories, including beads, shells, bangles, and feathers (Fig. 2). Other categories are limited to Badarian burials, and consist of pendants, finger(?)-rings, ear(?)-studs, and nose-plugs.[21] Their absence from Tasian burials can be related to the comparatively low quantity of Tasian graves (Fig. 3), as well as their limited occurrence in Badarian graves. In fact, the dress categories that were found in Tasian graves appear to be those that are most frequently used in Badarian graves.

An exception is formed by the relatively common group of pendants, which appear in a total of 23 Badarian graves. Still, their absence from Tasian burials could be explained by their spatial distribution in Badarian burials across the Qau-Matmar region. Pendants have only been recorded in a total of three Badarian burials in the Mostagedda district, against 17 and three Badarian burials in the Badari and Matmar districts respectively. This relatively low amount of burials in the Mostagedda district is particularly striking when the total number of Badarian burials in each district is taken into account (Fig. 4). A 1-sample chi-squared test ($\chi^2 > .05$) supports the view that pendant-containing graves are unequally distributed across the Qau-Matmar region (Table 2). The absence of pendants in Tasian graves could be linked to this pattern, which, in itself, could have had various causes (e.g. regional, temporal, or social).

[18] This has resulted in a lack of knowledge concerning the full size of the cemeteries, cf. Dubiel 2008: 12–13.

[19] For this reason, burials will be used as a unit of quantification in the following sections.

[20] Dress items were either worn by or deposited with the deceased (cf. Duchesne et al. 2003). Brunton frequently refers to necklaces or anklets, but does not state the basis for these claims. However, these identifications do receive some credibility on account of other references to dress items that have been put on or next to the dead.

[21] Finger(?)-rings, combs, and ear(?)-studs are assumed to be dress items, since they were never found in situ (cf. Brunton & Caton-Thompson 1928: 30; Brunton 1937: 53). Pendants are separated from beads on the basis of their off-centre perforation location (Beck 1981: 11). The pendant category includes the objects in class 89 of Brunton's bead corpora, the zoomorphic pendants, as well as the objects that Brunton termed "*pendant*", "*pierced pebble*", and "*pierced coral*". The 'pendants' from graves 5374 and 330 have been rejected, however.

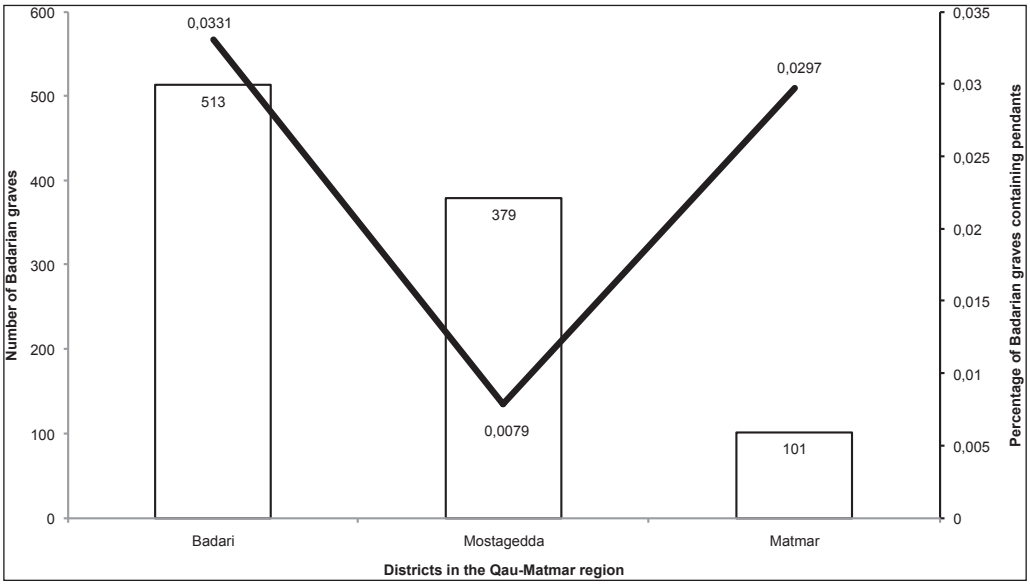

Fig. 4. Bar chart showing total number of Badarian burials per district in the Qau-Matmar region. The line chart shows the percentage of Badarian pendant-containing burials for each district.

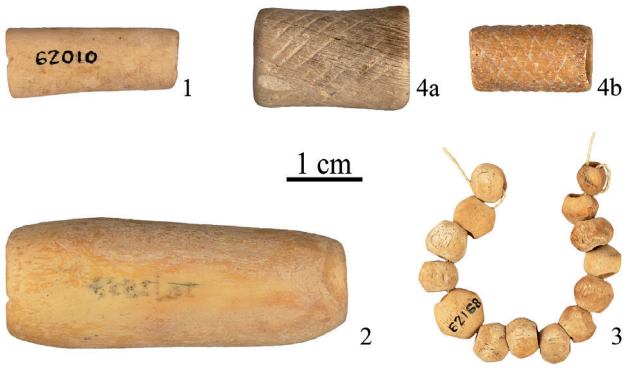

Fig. 5. Beads from Tasian graves 408 (no. 1), 2829 (no. 2), 1210 (no. 3), and 2913 (nos. 4a-b) (British Museum: EA 62010, 62054, 62068, and 62168). Based on photographs by author, courtesy of the Trustees of the British Museum.

Contrary to pendants, the use of feathers is virtually restricted to Badarian burials in the Mostagedda district. Beyond this district, feathers have only been reported in one other grave in the Badari district. This may again reflect a social, regional, and/or temporal variation in mortuary dress during the Badarian period. The presence of feathers in two Tasian burials in the Mostagedda district is consistent with this pattern.

Beads

Beads were found in a total of four Tasian burials (Fig. 5). Two graves produced a single bird bone bead, and another 14 bird bone beads. The fourth grave yielded two hippopotamus ivory beads. Unlike the bone beads, their surfaces are not smooth, but bear crosshatched incisions. Beads were located in a total of 97 Badarian burials, and are made of various types of stone, glazed steatite, animal products, and metal. Only some beads were originally determined to be of (bird) bone or ivory (Brunton & Caton-Thompson 1928: pls. V-VIII, XLIX-L; Brunton 1937: pls. VII-X, XXXIX; 1948: pls. III, XV, LXX; cf. Andrews 1981: 19–24). A personal inspection of these items has shown the fallacy of some of these determinations and the need to re-assess their material identification. However, a number of beads could be identified that resemble the Tasian beads in material, shape, size, and/or surface design.

The Tasian bone beads represent shaped sections of hollow bird bone shafts. Similar beads have been identified in Badarian graves in the Badari and Mostagedda districts (cf. Andrews 1981: 21–24). The beads from both grave groups show varying shapes and sizes, and, hence, have been classified to a wide range of cylinder, (flattened) barrel, or ring bead types (Brunton & Caton-Thompson 1928: pl. XLIX-L, 75K6, 79B3, 79B6, 79P3, 79P6, 86C16; Brunton 1937: pls. VII-VIII, X, XXXIX, 75Q1, 75Q4, 75Q7, 78A13, 78B7, 78P9, 79B2, 79B5, 79H9, 79H12). Most of these types only incorporate a single bone bead, thus testifying to the high variability of bone beads both within and across graves, as well as cultures. In fact, those types that include multiple exemplars are usually restricted to a single grave. Other types merely contain two beads from two Badarian burials. This highlights the absence of standardisation amongst the Tasian and Badarian bone bead corpora, and the resultant futility to clarify Tasian-Badarian relations by searching for exact bead parallels or variances. Even though this complicates matters, a comparative analysis of both corpora does show that a similar material was used in order to produce beads of roughly parallel shapes and sizes. A comparison can, for instance, be made between the bone beads from Tasian graves 408 and 2829, and those from Badarian grave 1215 (Figs. 5–6). Likewise, the bone beads from Tasian grave 1210 resemble those from Badarian grave 5406 (Figs. 5–6).

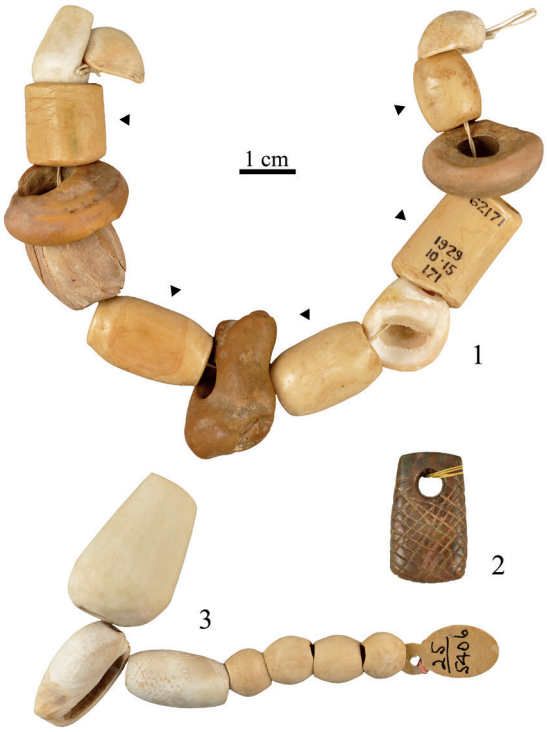

Fig. 6. Beads, pendants, and shells from Badarian graves 1215 (no. 1; arrows indicating bone beads), 595 (no. 2), and 5406 (no. 3). The objects are housed in the British Museum (EA 62171, 62152) and Bolton Museum (1925.45.30) respectively. Based on photographs by author, courtesy of the Bolton Museum and the Trustees of the British Museum.

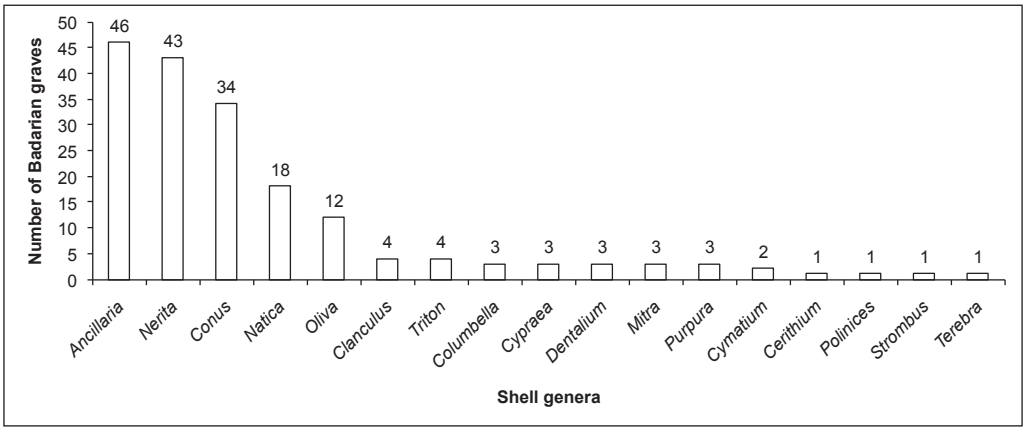

Fig. 7. Bar chart showing gastropod and scaphopod shell genera and the quantity of Badarian burials in which they have been found. Based on data published by Brunton.

The absence of standardisation similarly explains the lack of a Badarian equivalent for the Tasian 'fancy cylinder' ivory beads (Fig. 5; Brunton 1937: pls. VII, XXXIX, 76B3, 76B6). Although a hippopotamus ivory bead has been identified in the Badarian bead corpus, it has a smooth surface and is spheroid-shaped (Brunton & Caton-Thompson 1928: pls. VIII, XLIX, 82C3). The cross-hatched design of the fancy cylinder beads is, in fact, quite rare amongst the Tasian and Badarian bead corpora, but comparable to that of a stone pendant from Badarian grave 595 in the Mostagedda district (Fig. 6; Brunton 1937: pls. VIII, XXXIX, 89E10). Hence, the parallel use of hippopotamus ivory and crosshatched design points to correlations, rather than differences, between the Tasian and Badarian units.

The Tasian beads were found with one adult female and three children, aged ca. 3, 5, and 12–14 (Brunton 1937: 5–7, pl. VII). In Badarian burials, beads are likewise associated with (male and) female adults, as well as children from the age of infancy onwards. Like the Tasian bone beads, Badarian bone beads were found with a female adult and a child, but also with a male adult (Brunton & Caton-Thompson 1928: 6–18, pls. V-VIII; Brunton 1937: 33–43, pls. VII–X; 1948: 7–9, pl. III). The burial position of the beads has been described for two Tasian graves. The ivory beads were around a child's left wrist, whilst one of the bone beads was located between a child's knees and elbows. This bead was thus either worn by or placed beside the child.[22] Similar positions have been noted for various kinds of beads in Badarian burials (Brunton & Caton-Thompson 1928: 11, 16; Brunton 1937: 36, 42–43; 1948: 8, 10).

Marine shells

Perforated marine shells were found in a total of 12 Tasian and 79 Badarian burials. Most shells have been identified to the genus level in the excavation reports. The determination of species has only taken place for a limited amount of shells from the Badari region (Brunton & Caton-Thompson 1928: 38, pls. V-VIII; Brunton 1937: 58, pls. VII-X; 1948: pl. III; Andrews 1981: 19–24). Needless to say, the malacological nomenclature that is used in these reports is no longer up-to-date and is in need of revision.[23] For the purpose of this paper, however, it will be of no direct consequence to use the outdated taxonomic nomenclature.

[22] Dress deposition has also been noted in Naqada IIIA-B child burials at Adaïma, see Duchesne et al. 2003.

[23] For the majority of shells, the genus identifications appear to have been carried out correctly in the past. All genera are known from the Red Sea, whilst only some are found in the Mediterranean Sea. It, therefore, seems likely that the shells are from the Red Sea, but this needs to be verified by a determination of the species.

Table 3. List of Tasian ('(T)') and Badarian graves in the Qau-Matmar region that contain *Columbella* or *Mitra* shells, based on Brunton's publications. The table further notes their location, the sex/age of the deceased, as well as the shell genera identified by Brunton and by the author.

Grave	Location	Sex/age of deceased	Shell genera (Brunton)	Shell genera (Horn)
305	Mostagedda	Child (noted to be an adolescent)	*Columbella*	*Mitra*
426 (T)	Mostagedda	Child (noted to be half-grown)	*Columbella*	*Columbella*
448b (T)	Mostagedda	Infant	*Columbella*	
464 (T)	Mostagedda	Adult female (noted to be aged)	*Mitra*	*Mitra*
2201	Mostagedda	Child (8)	*Mitra*	*Mitra*
2523	Matmar	Adult female	*Columbella*	*Mitra*
3015 (T)	Mostagedda	Child (8)	*Columbella*	
3555	Mostagedda	Adult, possibly female	*Columbella*	
5425	Badari	Adult female	*Mitra*	*Mitra*
5761	Badari	Child	*Mitra*	*Mitra*

Table 4. List of Tasian ('(T)') and Badarian child burials in the Qau-Matmar region with shells in the waist area, based on Brunton's publications. The table further notes their location, the sex/age of the deceased, as well as the shell genera (as cited by Brunton, * verified by author) and their burial position.

Grave	Location	Sex/age of deceased	Shell genera (Brunton)	Burial position
301	Mostagedda	Infant	*Ancillaria, Nerita*	On the chest or waist
448b (T)	Mostagedda	Infant	*Columbella, Cypraea*	Round the waist
499	Mostagedda	Child (ca. 2)	*Nerita*	Round the waist
5364	Badari	Child (noted to be immature, and not an infant)	*Ancillaria, Cerithium, Conus, Natica, Nerita, Oliva*	Round the waist
5701	Badari	Child (noted to be immature, not an infant, and possibly female)	*Oliva*	From the region of the waist
5733	Badari	Small child (noted to not be an infant)	*Natica, Oliva*	At the hips

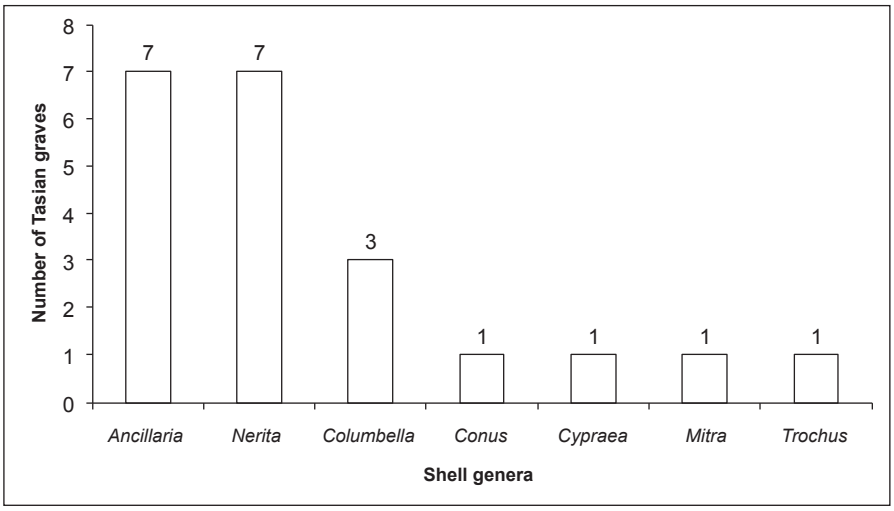

Fig. 8. Bar chart showing gastropod shell genera and the quantity of Tasian burials in which they have been found. Based on data published by Brunton.

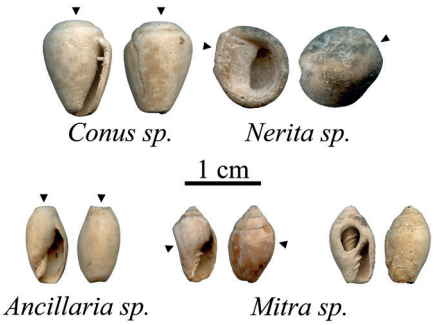

Fig. 9. Perforation locations of several shell genera from Badarian graves. The black arrows point to the perforation locations, except for the right *Mitra* shell. The *Conus* and right *Mitra* shells are from grave 2523 in the Matmar district (University of Cambridge Museum of Archaeology & Anthropology: 1931.909c). The *Nerita* shell is from grave 5425 in the Badari district, whilst the *Ancillaria* and left *Mitra* shell are from grave 492 in the Mostagedda district (Manchester Museum: MM 7489, 7492, 8724). Based on scans by author, courtesy of the Manchester Museum and the University of Cambridge Museum of Archaeology & Anthropology.

Figures 7–8 show the shell genera and the quantities of Tasian and Badarian burials in which they have been found. The Badarian graves include a broad variety of gastropod and scaphopod (*Dentalium*) shell genera. In contrast, a more restricted range of gastropod genera has been incorporated in Tasian graves. This might again be related to the comparatively low quantity of Tasian graves. Moreover, the great majority of shell genera in Tasian burials have also been detected in Badarian burials. This correspondence in shell use is further highlighted by the rate in which the shell genera have been used. In both grave groups, the *Ancillaria* and *Nerita* genera show the highest burial frequency (Figs. 7–8).

In both burial units, shells are similarly located in a variety of positions on and off the body of the deceased. These positions do not appear to be correlated with particular (sets of) genera, and can include shells with various characteristics. Both burial groups, however, show a possible association between *Columbella*/*Mitra* shells and the sex/age of the deceased. These similar fusiform-shaped genera are only found with adult females and children, albeit in a small amount of Tasian and Badarian burials (Table 3; Brunton & Caton-Thompson 1928: pls. VII-VIII; Brunton 1937: pls. VII, IX-X; 1948: pl. III; cf. Sharabati 1984: pls. 21, no. 1e, 26, no. 7). The stated variety in shell burial positions is similar for Tasian and Badarian graves that include adult males or females, or children. In both groups, however, only children have shells in the waist region (Table 4; Brunton & Caton-Thompson 1928: 10, 14–15, 27; Brunton 1937: 5, 29, 34, 36, 52). Furthermore, spatial distribution within or across cemeteries in the Qau-Matmar region does not appear to be interrelated with the use of specific shell genera or shells with comparable attributes, or with their positioning in relation to the dead in both burial groups. This is also the case when features of the grave (shape, size, orientation) or its occupant (sex, age, orientation, positioning) are taken into account, or when specific shells are related to the remainder of burial goods found inside the graves.

A macroscopic study of marine shells from eight Tasian and 52 Badarian graves further suggests that the shell genera from both grave groups were similarly perforated (Fig. 9). In both burial units, *Ancillaria* and *Conus* shells were perforated by removing (part of) the spire. This procedure results in the creation of a hole in the posterior end of the shell, which, together with the aperture of the shell, enables the shell to be strung through its naturally dissolved interior (Francis Jr. 1982: 713; Kohn et al. 1979; Sterba 2004: 9–10, 20). The *Nerita* shells from both grave groups were also threaded using the aperture and dissolved interior (Bandel 1992: 326), but here the hole has been created in the body whorl, located, in a ventral view, on the left lateral side of the shell near its posterior end, just below the apex. In the case of Tasian grave 2913, this

perforation type has been attested for all 13 *Nerita* shells. Two shells, however, reveal an additional perforation in the outer lip, a feature that appears to be unique to this grave in the study sample. Lastly, the body whorls of *Mitra* shells are perforated near the inner lip on the ventral side or, in a ventral view, on the left lateral side of the shell. Both types occur in Tasian and Badarian burials. Unfortunately, it has not been possible to subject the *Columbella* and *Cypraea* shells to a similar comparative study.

Feathers

Feathers were incorporated in two Tasian and six Badarian graves in the Mostagedda district, and one Badarian grave in the Badari district (Table 5). Whereas most graves contained a single feather, a single Tasian and two Badarian graves yielded multiple specimens (Brunton & Caton-Thompson 1928: 16, 28; Brunton 1937: 5, 7, 29, 35, 37–38, 43, 57). The avian source of the feathers has not been identified, with the exception of two night heron feathers and a fan of ostrich (or bird of the ostrich family) feather tips in a total of three Badarian graves (Brunton & Caton-Thompson 1928: 38; Brunton 1937: 58). The current identification of these feathers is thwarted, since most do not appear to have been distributed to museums.

The feathers in the two Tasian graves were associated with children, of which one was an infant and the other a 12 to 14-year-old. The feathers were situated in the region of the head (Brunton 1937: 5, 7, 29). The feathers in the seven Badarian burials were found with children (an infant and a three-year-old), as well as male and possibly female adults. They were again mostly located in the region of the head. However, feather(s) were also observed on the ribs and elbows of a male, and near the knees of a possible female (Brunton & Caton-Thompson 1928: 16, 28; Brunton 1937: 35, 37–38, 40, 43, 57).

Despite a lack of knowledge on the feathers' avian source, the Tasian and Badarian graves do concur on the number (i.e. single or multiple) of feathers used, their burial position in relation to the deceased, as well as the age of the dead with whom the feathers were found.

Bangles

Bangles were found in three Tasian and 29 Badarian burials, as well as two activity areas, in the Badari and Mostagedda districts (Brunton & Caton-Thompson 1928: 6, pls. V-VIII; Brunton 1937: 21, pls. VII-X). Each Tasian grave yielded a single ivory bangle in association with a child (Table 6). The majority of Badarian bangles are also made of ivory, and are found with children

Table 5. List of Tasian ('(T)') and Badarian feather-containing burials in the Qau-Matmar region, based on Brunton's publications. The table further notes their location, the sex/age of the deceased, the number of feathers, as well as their avian source and burial position (as cited by Brunton).

Grave	Location	Sex/age of deceased	Number of feathers	Avian source	Burial position
443	Mostagedda	Adult, possibly female	Single		Above the head
444	Mostagedda	Adult male, young	Single		Across lower ribs and elbows
448a (T)	Mostagedda	Infant	Single		On the face, across the mouth
1005	Mostagedda	Adult male	Single		On the head
1218	Mostagedda	Adult, possibly male	Single	Night heron (*Nycticorax*)	Unknown (burial disturbed)
2211	Mostagedda	Child (3)	Single	Night heron (*Nycticorax*)	On right (upper) side of head
2913 (T)	Mostagedda	Child (12-14), adolescent	Multiple		At the back of the head
3555	Mostagedda	Adult, possibly female	Multiple		Near the knees
5754	Badari	Infant	Multiple	Ostrich or bird of the ostrich family	Near the head

Table 6. List of Tasian ('(T)') and Badarian bangle-containing graves in the Qau-Matmar region, based on Brunton's publications. The table further notes their location, the sex/age of the deceased, the shapes of each of the bangles found inside the graves, and, where the full bangle has been preserved and studied, their inner diameters.

Grave or Area	Location	Sex/age of deceased	Bangle shape	Inner diameter
408 (T)	Mostagedda	Child (ca. 3)	Plain	3,75 cm
1205	Mostagedda	Adult male	Ridged Ridged	– –
1254	Mostagedda	Adult male	Ridged Ridged Ridged	– – –
1259	Mostagedda	Adult male	Ridged	–

Grave or Area	Location	Sex/age of deceased	Bangle shape	Inner diameter
2211	Mostagedda	Child (ca. 3)	Plain Plain Plain Plain Plain and single-knobbed	4,68 cm 4,48 cm 4,42 cm 4,4 cm 5,0 cm
2253	Mostagedda	Child (adolescent)	Ridged	–
2829 (T)	Mostagedda	Child (5)	Plain	–
2840 (T)	Mostagedda	Child (noted to be "very small")	Plain	4,1 cm
3521	Mostagedda	Adult male	Ridged	–
3537	Mostagedda	Adult male	Ridged	–
5112	Badari	Unknown	Ridged	–
5115	Badari	Adult male	Ridged	–
5126	Badari	Unknown	Ridged Ridged	– –
5128	Badari	Adult male	Ridged	6,1 cm
5131	Badari	Unknown	Ridged	–
5143	Badari	Unknown	Ridged	–
5150	Badari	Adult male	Unknown	–
5151	Badari	Adult female	Ridged Ridged Ridged Double-ridged Plain and multi-knobbed	– – – – –
5152	Badari	Unknown	Ridged	–
5402	Badari	Unknown	Unknown	–
5403	Badari	Unknown	Ridged	–
5406	Badari	Unknown	Multi-knobbed	–
5428	Badari	Unknown	Unknown	–
5453	Badari	Unknown	Unknown (>1x)	–
5705	Badari	Adult male	Ridged	–
5719	Badari	Child (ca. 5)	Ridged	5,87 cm
5762	Badari	Adult male	Ridged	5,51 cm
Area 6000	Badari		Ridged and single-knobbed	–
Area 11700	Mostagedda		Plain and single-knobbed Plain and single-knobbed	– –

and adults in a total of 24 burials.[24] The adults mostly consist of males, however, there are 10 individuals with unknown sex and age. Most Badarian burials included a single bangle. Multiple bangles were attested in a total of six graves belonging to male and female adults, as well as a single child. Some bangles were still in situ, and were commonly found around the wrist or forearm (Brunton & Caton-Thompson 1928: 30; Brunton 1937: 53).

The inner diameter of the bangles increases with the age of the deceased in Badarian burials (Table 6)[25]; this is related to the growing size of the wrist. The shapes of the bangles are also possibly linked with age, however.[26] The exterior face of a large group of bangles is marked by a distinct central ridge, which is abutted on both sides by either convex or concave surfaces (Table 6; Fig. 10). These 'ridged bangles' are mostly associated with adults. Other bangles display a plain, more rounded exterior surface, and are only found with children. Four of these 'plain bangles' appear in a Badarian child burial, and a single one in two Tasian child burials. This possible age-related division only becomes statistically significant when Tasian and Badarian bangles are grouped together (Table 7; 2-tailed Fisher's exact test: $P \approx 0{,}017$). Still, it seems challenged by the presence of ridged bangles in two Badarian child burials (Brunton & Caton-Thompson 1928: pls. VII, XXIII, 20; Brunton 1937: pls. IX, XXV, 7). Yet, the child in burial 2253 is referred to as an adolescent (Brunton 1937: 41), and may rather be grouped with the adults than with the other children, who are stated to be 5 years or younger (Table 6). The bangle in intact grave 5719 was not worn, but placed near the hands in front of the face of a 5-year-old (Brunton & Caton-Thompson 1928: 15, 30; *contra* pl. IX, 12). Its inner diameter also seems larger than that of a bangle of another 5-year-old in Tasian grave 2829 (see Brunton & Caton-Thompson 1928: pl. XXIII, 20; Brunton 1937: pl. XIII, 21). This indicates that it was probably (intended to be) worn by an older individual. It may, therefore, be interpreted as a gift from the living, rather than as a personal possession of the child. The statistical significance ($P \approx 0{,}0017$) increases as a result of these re-analyses (Table 7).

There are also a small number of ivory bangles with protruding knobs, of which two are multi-knobbed and five are single-knobbed (Fig. 11; Table 6). The multi-knobbed bangles were found in two Badarian burials (Brunton & Caton-Thompson 1928: 9, 12, pl. XXIII, 18), of which one bore the remains of an adult female. The bangle from this grave has a rounded exterior surface, with

[24] Five additional bangles are reportedly made of horn/tortoiseshell, leather, or fibre (Brunton 1937: 53).

[25] Bangles are usually oval-shaped. When only fragments remain, this feature can hinder the exact measurement of the bangle's inner diameter. Adult and child bangles can be readily distinguished in size, however.

[26] Tassie (2014: 260) also refers to this association, but fails to acknowledge its source (Horn 2010).

Table 7. Calculation of Fisher's Exact Test values to explore whether specific bangle types (ridged or plain) are related to the age of the deceased.

Contingency table 1

	Adults	Children
Presence of ridged bangle	11*	2*
Presence of plain bangle	0	3

* Assumption: the bangles in graves 2253 and 5719 belong to children

Contingency table 2

	Adults	Children
Presence of ridged bangle	13**	0**
Presence of plain bangle	0	3

** Assumption: the bangles in graves 2253 and 5719 belong to adults

Since the sample sizes are small in the two contingency tables, the two-tailed Fisher's Exact Probability Test is used instead of the chi-square test (calculated using Real Statistics for MS Excel; see also VanPool & Leonard 2011: 249-252).

Hypotheses:

H_0: the distribution of Tasian-Badarian adult and child burials (or original owners) across the two bangle type categories (ridged and plain bangles) is not different.

H_1: the distribution of Tasian-Badarian adult and child burials (or original owners) across the two bangle type categories (ridged and plain bangles) is different.

Contingency table 1 results in $P \approx 0.017857143 < 0.05$. The null hypothesis ($H_0$) is rejected at a significance level (α) of 0.05.

Contingency table 2 results in $P \approx 0.001785714 < 0.01$. The null hypothesis ($H_0$) is rejected at a significance level (α) of 0.01.

four individual knobs spread out around its hoop.[27] Two single-knobbed bangles were recovered from a Tasian and Badarian child burial (Brunton 1937: 6, 40, pls. XIII, 16, XXV, 12). They have hoops with rounded exterior surfaces, and have smaller inner diameters than the multi-knobbed bangle. Although the evidence is insubstantial, single-knobbed bangles may have been worn by children, and multi-knobbed bangles by (female?) adults. A further three single-knobbed

[27] The other multi-knobbed bangle may have been distributed to the Bolton Museum, but is currently missing.

bangles were located in Areas 6000 and 11700 in the Badari and Mostagedda regions (Brunton & Caton-Thompson 1928: 6; Brunton 1937: 21, pls. XXV, 13, XLIII, 16). The single bangle fragment from Area 6000 was found amongst village remains, but might originally have derived from nearby Badarian Cemetery 6000 (Brunton & Caton-Thompson 1928: 17–18).[28] Its study has shown that the bangle is single-knobbed, but that its exterior surface is marked by a central ridge. This feature, along with its relatively large inner diameter, may indicate that the bangle was made for an adult. If so, it could constitute a third type of knobbed bangle. Two other, unstudied single-knobbed bangle fragments were found with village remains in Area 11700. They are cited as possible grave goods, and might derive from Badarian graves nearby (Brunton 1937: 18–21, pls. II, VII–X).

A personal study of Tasian and Badarian bangles has been able to demonstrate further commonalities in the field of material and technology. The morphology and material structure of two Tasian plain bangles show that they have been produced out of a longitudinal section of a hippopotamus lower canine (*contra* Andrews 1981: 20).[29] This also holds for a large number of Badarian plain, ridged, and knobbed bangles. The bangle from grave 5762 serves to illustrate their technology (Fig. 10). The faces of two opposite parts of this bangle display a number of structural features that are consistent with those observed in a transverse section of a lower canine. These include the triangular disposition of the dentine lamellae around an arc-shaped commissure, as well as the natural fractures that have developed from this commissure (cf. Caubet & Poplin 1987: 274–276; Krzyszkowska 1990: 42–47). These bangle parts can thus be aligned with the transverse axis of the tusk (Fig. 10), thereby showing that the bangle was made from a longitudinal section of a lower canine. This identification is consistent with the bangle's morphology. The bangle segments that are aligned with the longitudinal axis of the tusk are thinner, and sometimes have a flattened exterior face (Figs. 10–11). This is due to the fact that these parts of the bangle were cut from the lateral edges of the tusk. This shows that the manufacturer made optimal use of the ivory blank from which the bangle was cut.

The Tasian and Badarian single-knobbed bangles from graves 2211, 2840, and Area 6000 were similarly produced from a lower canine. Interestingly, their knobs are all situated to one of the lateral sides of the tusk (Fig. 11). Their possible position within the corner of an ivory blank may have provided more space for cutting the knob. Regardless, the matching locations of the knobs

[28] Brunton seems to share this viewpoint elsewhere in his publication (Brunton & Caton-Thompson 1928: 30).

[29] The bangle from Tasian grave 2829 was originally distributed to the British Museum, but is currently missing.

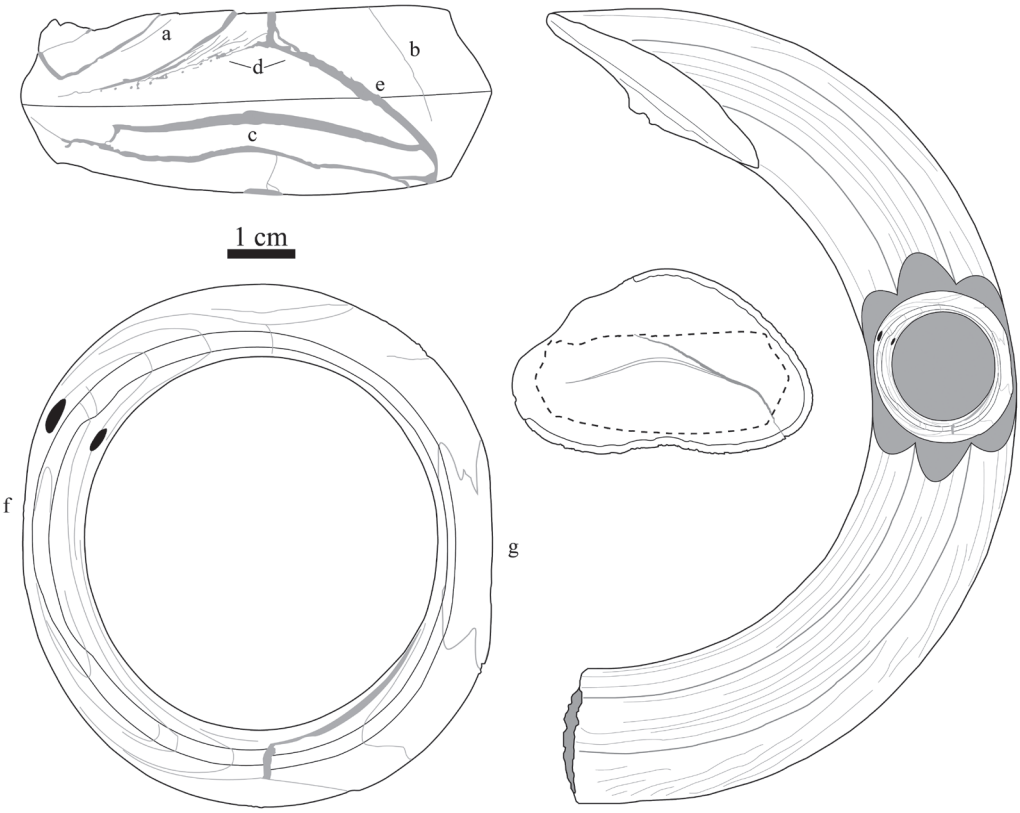

Fig. 10. Bangle from Badarian grave 5762, made from the dentine (i.e. ivory) of a hippopotamus lower canine (Petrie Museum: UC9170). Black lines mark the outline of the bangle, grey lines the natural cracks and holes in the ivory. *Top left*: part of the exterior face of the bangle. A/b/c indicate the cracks in the ivory that follow the triangular disposition of the dental lamellae around the arch-shaped commissure (d). The latter appears as a series of small holes on the left, whilst on the right it has become part of the natural fracture (e). *Bottom left*: view of one of the ends of the bangle, f and g marking the thinner, flattened parts of the bangle. *Middle*: proposed former position of bangle (dotted line) within the transverse section of a hippopotamus lower canine (based on photograph by Dr S. O'Connor, University of Bradford). *Right*: re-positioning of the bangle within a hypothetical part of the lower canine. Latter two images are not scaled.

show that both Tasian and Badarian single-knobbed bangles were produced via a similar technological process. The Tasian bangles can, therefore, be said to be consistent with a number of Badarian bangles with regard to their material, technology, shape, bodily position, as well as perhaps their role in the construction of an age-related identity.

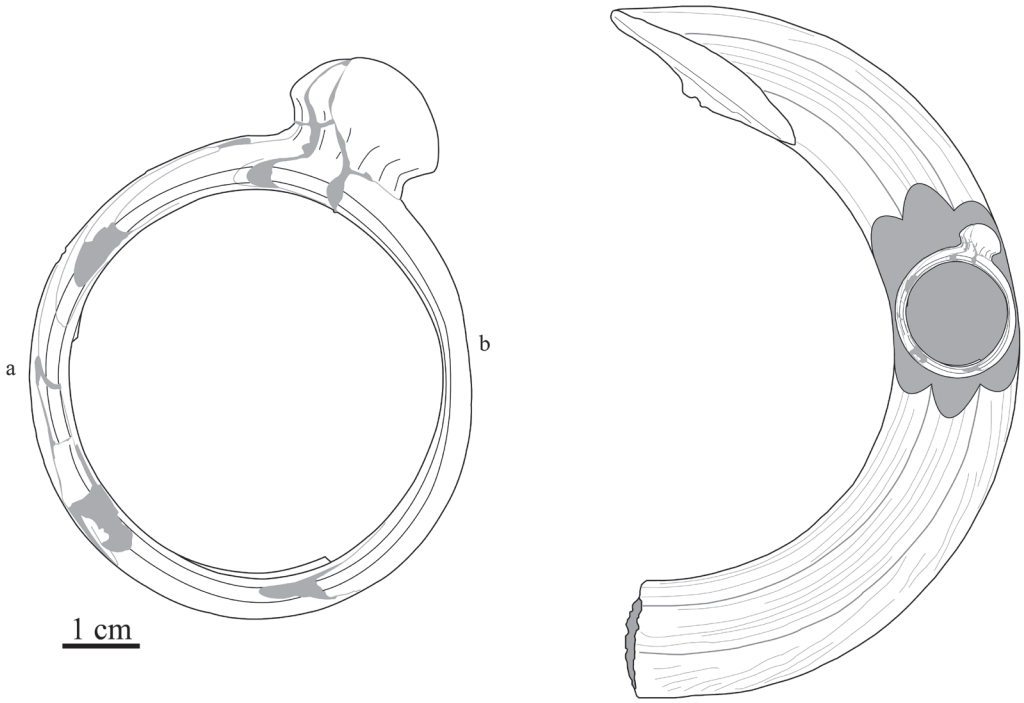

Fig. 11. *Left*: view of one of the ends of a single-knobbed bangle from grave 2211 (British Museum: EA 62223). A and b mark the thinner, flattened parts of the bangle. *Right*: re-positioning of the bangle within a hypothetical part of a hippopotamus lower canine. The last image is not scaled.

Discussion

The earlier sections of this paper have cast doubt on the criteria that Brunton used to validate the Tasian culture in the Qau-Matmar region. Despite their multiplicity, the biconical bowls seem to have been fundamental to each of these cultural proxies. The acceptance of the Tasian culture thus depends on the reading of this rather heterogeneous group of pots. Even if these objects are considered to form a distinct unit, the reason for their supposed dissimilarity to Badarian pottery need not be their relation to another culture. Instead, other interpretations can be offered that explain this distinction as part of the material variety within the Badarian archaeological unit across the Qau-Matmar region. One could think of temporal, social, functional, or regional factors that could similarly account for this variation.

This hypothesis is not only consistent with the noted similarities in mortuary practices and the use of the same burial grounds, but also seems supported by

the results of a contextual study of Tasian and Badarian mortuary dress. These show that both grave groups included similar categories of dress, and were equally affected by regional and/or temporal patterns in the use of pendants and feathers. Like the biconical bowls, these patterns appear to indicate a variation in dress use restricted to the Mostagedda district, yet one that affected both Tasian and Badarian burials alike. Furthermore, their shared dress categories reveal a large number of correlations. These pertain to parallels in material or shell genera, production technology, attributes (e.g. shape, size), quantity, burial position, and possible relations to sex/age. Certain shell genera may have been linked to specific sex and/or age groups, whilst shell waist belts may have been worn by children only. The shapes and sizes of bangles were also possibly linked with age, and perhaps sex. These patterns could indicate that these dress items were used in order to construct a sex- and/or age-related identity of the deceased. Yet, the notion that these artefacts do not occur with other people of similar sex and/or age seems to suggest that such identities would have constituted more than just these aspects.

Even though dress items were only found in 14 Tasian graves, these graves have been identified as Tasian on the basis of similar cultural proxies as the other Tasian burials. Grave 2840, for example, included a double burial of an adult female and a small child who were not only buried with a single-knobbed bangle and a string of *Nerita* shells, but also with a 'typically Tasian' travertine palette and biconical bowl (Brunton 1937: 6, 29, pls. VII, XII, 38, XIII, 19, XXII, 25–30). This substantiates the notion that the latter types of objects cannot be used in order to distinguish Tasian graves from Badarian graves. Moreover, their inclusion within the Badarian repertoire causes the Tasian ascription of celts and beakers, as defined by Brunton, to become untenable. The more recently advanced theory that Badarian people in the Nile Valley obtained these beakers from a Tasian desert-based group can also be discredited. Not only does their Badarian funerary use appear to be more extensive, their fabric seems to identify them as Badarian products from the Nile Valley. This is supported by the presence of similar beakers in Badarian-like Nile Valley contexts at Armant and Maghar Dendera II. The manifestation of 'Tasian' beakers in the Rayayna Desert or Dakhla Oasis can be explained as imports from the Nile Valley (cf. Gatto 2010: 152–153), or simply as the remains of mobile Badarian(-like) groups. Their mobile pastoral lifestyle and use of Nile, Eastern Desert, and/or Red Sea products seem to indicate a passage through multiple zones, even if some of these products were obtained through exchange. Travel in the Western Desert was probably limited to passages between water sources, such as the Nile and the oases (Wengrow 2003: 133, 2006: 54; Riemer & Kindermann 2008: 624–625; Wengrow et al. 2014: 107).

Finally, it is to be noted that the individual use of burial dress for an appraisal of the Tasian-Badarian divide is not straightforward, given that the definition

of these archaeological units is ultimately based on another artefact category, i.e. pottery. As demonstrated by Perlès (2013), different artefact categories can have different tempi of change over time. The Tasian-Badarian transition can, therefore, be defined by transformations in pottery, but demonstrate continuities in dress. Yet, the applicability of this theory is dependent on the acceptance of a Tasian-Badarian chronological succession. As discussed, the evidence for this claim is questionable, and possibly unsupported by the intermixture of both grave groups. A temporal distinction is also challenged by the uncorroborated separation of both groups of pottery (and, by extension, archaeological units), and possibly by the regional analogies in the use of feathers and pendants. In this respect, the evidence gathered in this paper seems to support the integration of Tasian and Badarian remains within the confines of the Qau-Matmar region. Importantly, this should not be taken as evidence for a single Badarian culture as seen from a cultural-historical perspective. Cultural or ethnic identities need not be expressed through material variation (Jones 1997: 108). Cultural units can, therefore, homogenise internal ethnic or cultural variability, or obscure links with other cultural units in space and time. For these reasons, it seems more appropriate to speak of a Badarian archaeological unit.

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